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Junior Mortgage Financing and Other Borrowing Against Inflated Housing Equity

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JUNIOR MORTGAGE FINANCING AND OTHER BORROWING AGAINST INFLATED HOUSING EQUITY

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Abstract

In recent years, rapid inflation in the market value of existing homes has generated huge amounts of housing equity that may serve as collateral for mortgage borrowing by homeowners. The proceeds from such borrowing may be used by individuals for a variety of purposes, including the purchase of real estate as well as the acquisition of other tangible or financial assets.

This paper examines the upsurge in mortgage borrowing by homeowners against their accumulated housing equity during the period 1975-77, considers the factors determining the demand for these funds, and provides information on the sources of supply. Section I discusses the developments that have generated the increased amounts of equity in the stock of housing, presents aggregate measures of the volume of mortgage funds raised by individuals against accumulated housing equity in recent years, and evaluates the relative importance of the ways by which individuals have been raising these mortgage funds. Section II evaluates the economics of borrowing against housing equity, considering both the logic of such borrowing for various purposes, and the relative costs of alternative ways of raising the mortgage funds--such as junior mortgages or refinanced first mortgages. Section III concentrates on the supply side of the market for junior mortgages, examining the junior mortgage lending powers of various types of institutions, lending restrictions posed by state usury ceilings, and other restrictions on the supply or use of junior mortgage funds.1/

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I. GENERATION OF HOUSING EQUITY AND BORROWING AGAINST ACCUMULATED EQUITY

Average prices of existing homes sold more than doubled between early 1970 and early 1978, reaching a level in excess of $50 thousand. Over the same period, the Consumer Price Index (all items) rose by considerably less, increasing on the order of 65 per cent. Moreover, the rate of increase in home prices has been quite persistent, despite significant slowing in the growth of prices of consumer goods and services since the peak rates of 1974. Indeed, in 1977, average prices of existing homes sold rose by nearly 14 per cent (Table 1).

The amounts of capital gains accrued by homeowners have, of course, varied widely in different parts of the country. As shown in Table 1, average prices of existing homes sold in the West have increased most rapidly; average sale prices in this region rose by about one-fourth in 1977. The slowest rates of price appreciation have been registered in the Northeast section of the country, where average sale prices increased by less than 7 per cent last year. Geographic differentials in home price movements have apparently been associated in large part with differing degrees of economic expansion in various parts of the country and with ongoing population shifts in favor of the West and the South.

The rapid inflation in the prices of existing homes, which has no doubt been spurred by expectations of further price appreciation, has boosted the market value of the housing stock to more than $1.5 trillion (Table 2). Due to this inflation, household equity in homes has risen sharply in recent years despite unprecedented rates of mortgage debt

formation. Aggregate housing equity exceeded an estimated $900 billion at the end of 1977, providing a huge base for additional mortgage borrowing by homeowners. The volume of funds raised against equity is, of course, contingent upon the availability of mortgage credit.[2/]

Measurement of borrowing against housing equity. Individuals have been borrowing record amounts of funds against inflated housing equity in the past few years. A comprehensive measure of net funds raised by households against equity in existing homes can be constructed for the period since 1970. This measure equals total long-term home mortgage funds raised by households in a given period, less estimated amounts of mortgage funds raised for the purchase of new homes.[3/] The residual represents net borrowing by households, for whatever purpose, against previously existing housing collateral.

The existing-home component of household mortgage borrowing rose to a seasonally adjusted annual rate (SAAR) of more than $40 billion in the fourth quarter of 1977 (Chart 1). During the past two years, it has accounted for nearly half of total home mortgage debt formation--about double the proportion during the previous five years. In terms of volume, this component has actually exceeded the net increase in short- and intermediate-term consumer credit--instalment and noninstalment combined--during the current economic expansion, in sharp contrast to experience in earlier periods (Chart 2).

Ways of raising funds against housing equity. Individuals may raise funds against accumulated equity in the stock of housing in a

variety of ways:[4] (1) by increasing the size of outstanding first mortgages by means of refinancing, (2) by raising additional funds through recourse to open-end provisions of outstanding first mortgages, (3) by taking out first mortgages on homes owned free and clear,[5] (4) by taking out junior mortgages on properties already securing first mortgages, or (5) through transactions in existing homes.

A large portion of the funds raised by the household sector against housing equity in recent years has apparently been generated through transactions in previously owned homes. As shown in Chart 3, unit sales of existing homes reached unprecedented levels by the end of 1977, and the dominance of existing-home transactions in the market has intensified in the past several years. Moreover, net credit use per existing-home transaction has increased as average prices of existing homes sold have risen markedly--by about 100 per cent since 1970--while average loan/price ratios on conventional first mortgages have been historically high.

Two general types of transactions can generate increases in mortgage debt secured by the stock of existing homes. In one case, owners of existing homes sell to and buy from other members of the home-owner group, and the new mortgages taken out by buyers exceed the outstanding mortgage debts of sellers; in this case, buyers as a group do not reinvest all the equity accrued in their previously owned homes, but opt for larger mortgage loans--perhaps as large as lenders will grant. In the second general case, owners of existing homes sell to new entrants

to the homeowner group, and the mortgages incurred by the buyers exceed the remaining outstanding debts of the sellers. In this case, the sellers may either buy a new home or leave the homeowner group.

Press and trade reports have dramatized increases in junior mortgage and refinancing activity during the past two years. While it does not appear that junior mortgages or refinancings have been the major force behind the recent upsurge in total mortgage borrowing against equity in existing homes, it is clear that the volume of funds raised through these types of borrowing has been rising.

Junior mortgage activity has definitely increased during the past two years, particularly at commercial banks and finance companies. Some creditors are still averse to lending for junior mortgages because the value of the collateral may be uncertain in the event of foreclosure, but interest rates in excess of 10 per cent and favorable charge-off experience in recent periods[6/] have encouraged some institutions to invest in junior mortgages secured by growing home equities. From the homeowner's point of view, junior mortgages have become a more attractive borrowing vehicle, particularly in view of the general price inflation of recent years; these loans usually provide larger amounts of funds, at longer terms, than are available via consumer instalment credit. There are, however, a number of legal or regulatory constraints on the supply of funds to this market, including Federal or state restrictions on powers of various types of financial institutions to invest in junior mortgages, state-imposed ceilings on the maximum interest rates that may

be charged on such loans, and state restrictions on junior mortgage lending for some purposes. These restrictions on supply are discussed in some detail in Section III.

Borrowing by homeowners through refinancing of outstanding first mortgages has apparently picked up somewhat in the past few years, although not so vigorously as junior mortgage borrowing. Refinancing activity is ordinarily constrained by the high cost of the loan transaction--for such items as property appraisal, title search, and recording of deeds and other documents. Refinancing activity has also been limited in recent periods because interest rates on new first mortgages have generally remained above rates on most outstanding loans made in periods other than 1974 and parts of 1975.[7/]

A survey of consumer finances, conducted in September 1977, indicates that the proportions of households with junior mortgages or refinanced first mortgages are only marginally above those recorded early in the 1970's.[8/] As indicated by participants in the survey, no more than 6 per cent of households with first mortgage debt also had a junior mortgage (Table 3). And 7 per cent reported having refinanced their first mortgages, at some time in the past, in order to raise additional funds.

The consumer survey data suggest that such activity has picked up somewhat in recent periods, particularly for junior mortgage borrowing. Junior mortgages ordinarily are intermediate-term loans, and about half of the number of such mortgages reported by the households in the survey

had been originated since the beginning of 1976. Moreover, it appears from Table 3 that the bulk of recent junior mortgage financing has reflected borrowing against equity by homeowners, rather than the extension by home sellers of "purchase-money" mortgage credit to home buyers--a more important phenomenon in the past. While recent junior mortgage lending activity has been most pronounced on the West Coast, where home price increases have been most pronounced, increasing numbers of financial institutions in other parts of the country have been marketing junior mortgages on homes. Activity in the middle-Atlantic area (D.C., Maryland, Virginia) and in the Southeast has been relatively vigorous.

Surveys of commercial banks confirm the increase in junior mortgage activity indicated by the consumer survey data. The number of banks involved in junior mortgage financing has been growing rapidly over the past two years. For example, about half of a sample of 140 banks contacted in 1977 by the Consumer Bankers Association were offering junior mortgage loans to their retail customers, and nearly half of the remainder were seriously considering offering junior mortgage financing--in some cases to meet competitive pressures from other banks in their trade areas.[9/] Some banks, of course, refer inquiries about junior mortgages to a nonbank subsidiary of their bank holding company; in some cases, the banks purchase the junior mortgages made by the nonbank subsidiaries.

II. THE ECONOMICS OF BORROWING AGAINST ACCUMULATED HOUSING EQUITY

It is clear that inflation in the market value of homes has provided individuals large amounts of collateral for mortgage borrowing. The amount of funds actually demanded in a given period will depend upon the level of mortgage rates and terms and the relative costs of the various types of credit available to households, as well as upon the rates of return available on various investment alternatives. This section discusses the economic bases for "monetizing" housing equity through borrowing, and considers the factors determining the relative attractiveness of the various ways of raising the mortgage funds.

The logic of monetizing housing equity through borrowing. Capital gains on homes provide collateral for borrowing at mortgage rates and terms available in the market--ordinarily more favorable than available on consumer credit. Under favorable credit market conditions, the availability of relatively low-cost mortgage credit may alter the terms of substitution between present and future consumption, as well as alter the form of a given level of consumption by changing the relationship between the cost of durable goods services and the market price of counterpart consumable services (by lowering the "rental rate" of durables).

Homeowners may raise funds against housing equity not only for the purchase of tangible assets, such as consumer durables and real estate, but also to increase the liquidity of their balance sheets through the acquisition of financial assets. The net costs and benefits of converting illiquid housing equity to liquid financial asset balances

through mortgage borrowing will depend primarily on the spread between long- and short-term interest rates and on the prospects for income growth.

Borrowing against housing equity--particularly in connection with transactions in homes--and simultaneous acquisitions of financial assets need not imply non-economic behavior on the part of the household, even if mortgage rates paid are above yields on the assets acquired. In a world of uncertainty and imperfect capital markets, it is not necessarily economical to minimize debts by holding zero financial assets. Indeed, survey data reveal that a majority of households have debts and hold financial asset balances at the same time, even when borrowing costs are higher than yields on the financial assets.

The after-tax net interest cost of borrowing mortgage funds and investing these funds in financial assets may be approximated as:

(1) $$(1-t)\,(m-i),$$

where t is the individual's marginal income tax rate, m is the mortgage rate paid, and i is the yield on the financial assets acquired. This net after-tax interest cost may be compared by the household with the perceived opportunity cost of holding illiquid assets (equity in homes or consumer durables) in an uncertain world--an opportunity cost which varies directly with the probability of future financial difficulties. If the household balance sheet were highly illiquid, income shortfalls would have to be met by the sale of durable assets in highly imperfect capital markets, by borrowing at high interest rates (since the borrowing would be done when the consumer was in financial difficulty), or by a drop in consumption--none of which are attractive alternatives.

Relative costs of various ways of borrowing against accumulated housing equity. Individuals involved in selling homes on which they have accrued substantial capital gains may have the opportunity to raise large amounts of funds at relatively low costs. The marginal costs of borrowing against accumulated equity through new first mortgages for those households already engaged in selling and buying homes are typically quite low, per dollar raised, relative to the costs of other forms of household borrowing--including junior mortgage borrowing or refinancing for homeowners who have not moved. Transactions costs associated with new first mortgages will have been incurred by the homebuyers, regardless of the size of the mortgages received. Moreover, the relatively low interest rates on first mortgages--which averaged about 9 per cent during 1977--ordinarily are not highly sensitive to increases in loan/value ratios, except at high levels of this ratio. Available data suggest, for example, that the interest rate differential on new conventional first mortgages with 50 per cent and 75 per cent loan/price ratios typically is only about 10 basis points. Of course, such a rate differential would apply to the entire loan, not just to the incremental portion.

The effective marginal interest rate on mortgage funds raised against accumulated equity by an individual engaged in selling and buying homes may be calculated as:[10/]

(2) $$r^{me} = r^s + \frac{(r^a - r^s)L}{ME},$$

where:

r^a : rate on mortgage loan actually acquired for purchase of home.

r^s : rate available on mortgage loan with loan/value ratio corresponding to the case where all equity accumulated in previous home is reinvested in home purchased.

L : size of mortgage loan acquired for purchase of home.

ME : amount of equity in previous home that is "monetized" in process of selling and buying (accumulated equity in home sold less downpayment on home purchased).

Ordinarily, $L \geq ME > 0$, and r^a will vary directly with the size of ME. For example, assume that the buyer of a house priced at $100,000 has accumulated $50,000 equity in the home he is selling, and that mortgages for the purchase of the new home are available with interest rates of 9.00, 9.10, and 9.20 for loan/value ratios of 50, 70, and 80 per cent, respectively. Using formula (2), the effective marginal rate paid for funds raised against accumulated equity would be 9.35 per cent if $20,000 equity were monetized (choosing the 70 per cent loan/value ratio, rather than 50 per cent) and 9.53 per cent if $30,000 equity were monetized (choosing the 80 per cent loan/value ratio).

A homeowner not engaged in selling his home who wishes to borrow funds for some investment or consumption purpose has several major alternatives: (1) take out a consumer loan, either unsecured or secured by the consumer durables purchased; (2) take out a junior

mortgage against accumulated equity in his home; (3) refinance an outstanding first mortgage, increasing the size of his first mortgage debt in the process; (4) take out a new first mortgage if there is no outstanding mortgage debt.

If the amount of funds sought is small, a consumer loan is an economical option. Large transactions costs on mortgage loans, particularly first mortgages, make mortgages relatively expensive for small loans, even when interest rates on consumer loans are higher. Moreover, for small loans, the monthly payments required on the relatively-short-maturity consumer loans may not be unduly burdensome relative to current income. Table 4 shows representative consumer loan rates and contract maturities for selected loan types at various institutions.

Mortgage loans are generally preferable to consumer loans when a homeowner wishes to borrow relatively large amounts of funds at intermediate- or long-term maturity. For homeowners with some outstanding mortgage debt, a choice must be made between junior mortgage borrowing and refinancing of outstanding first mortgages. The transactions costs for these two alternatives may differ greatly, since requirements of various lenders concerning title search, appraisal, credit reports, etc. can be quite different. It should also be noted that the transactions costs paid by borrowers are often smaller with second mortgages than with firsts, partly because some lenders promoting these loans absorb whatever closing costs are involved, planning to recoup these costs through interest income.11/

A summary of typical terms on junior mortgages made by a sample of commercial banks in 1977 is provided in Table 5. Generally, the junior mortgages offered by respondent banks to individuals were of large size--as compared with consumer loans--had intermediate-term maturities, and interest rates ranging between 10 and 15 per cent. Most banks write junior mortgages for no more than 80 per cent of the appraised value of the property, less any outstanding mortgages.

Refinancing outstanding first mortgages can, of course, be a relatively expensive way for households to raise additional funds when interest rates have been trending upward and balances on outstanding first mortgages are large. In terms of interest rates alone,[12/] the relative attractiveness of rates on junior mortgages, J, and refinancings, R, can be calculated as follows:

$$J\text{-}R = (r_j - r_f^n) - (r_f^n - r_f^o)\frac{B}{A} \quad (3)$$

where:

A: additional funds to be raised through junior mortgage or refinancing.

B: balance on outstanding first mortgage.

r_j: rate on junior mortgage loan.

r_f^n: rate on new first mortgage loan.

r_f^o: rate on outstanding first mortgage loan.

Ordinarily, $r_j > r_f^n$. Moreover, when interest rates have been trending upward, it is likely tha $r_f^n > r_f^o$.

When the expression J-R in equation (3) is positive, the interest rate on a junior mortgage is high relative to the effective interest cost of raising additional mortgage funds by refinancing an outstanding first mortgage. Given the various rates of interest (r_j , r_f^n , r_f^o), the relative cost of junior mortgage financing will vary directly with the ratio B/A. For example, assume that the homeowner wants to raise an additional $20,000 in mortgage credit, and that r_j = 12 per cent, r_f^n = 9 per cent, and r_f^o = 7 per cent. If the balance on the outstanding first mortgage were less than $30,000, the junior mortgage would be the more expensive option. Otherwise, refinancing would be relatively expensive.

III. SOURCES OF JUNIOR MORTGAGE FUNDS AND CONSTRAINTS ON LENDING

As discussed in the previous section, junior mortgages may be the most economical way for households not engaged in selling homes to liquify their accumulated housing equity through borrowing, particularly when interest rates have been trending upward and the balances on outstanding first mortgages are large. As indicated below, a wide variety of financial institutions has traditionally invested in junior mortgages to some degree.[13/] Moreover, the junior mortgage lending powers of Federally-chartered depository institutions have been expanded in recent years, and restrictions on junior mortgage lending by state-chartered depository institutions and finance companies have been eased in many areas. At the same time, approximately half the states in 1977 still

prohibited certain institutions from making loans secured primarily by junior liens on homes, and restrictions on household use of funds as well as on maximum interest rates, loan sizes and/or loan maturities can limit junior mortgage lending even where permitted by law.

Junior mortgage lending by financial institutions

Data on amounts of junior mortgages are not collected regularly by trade associations, Federal Credit agencies, or Federal and state regulatory agencies.[14/] Fragmentary data from 1971 and 1975 indicate that a variety of financial institutions has traditionally engaged in junior mortgage lending (Table 6), and data from the September 1977 survey of consumer finances confirm this fact. There are, however, a number of legal and regulatory constraints on the supply of funds to this market. The various types of institutions that make junior mortgages have differing degrees of lending power, as defined by Federal or state regulations. While there has been a definite trend toward broader lending powers, significant constraints still exist for some types of institutions.

National banks. Until August 1974, National banks were permitted to make junior mortgages only in "abundance of caution" situations--the loans were to be based primarily on the credit worthiness of the borrower rather than on the value of the collateral.[15/] Currently, National banks may invest in loans secured primarily by junior liens on homes, and their holdings may amount to as much as 10 per cent of the maximum amount National banks are permitted to invest in conventional real estate loans; in practice, this maximum is usually equal to the bank's time and savings deposits. Moreover, there are no restrictions on the use of funds by borrowers.

Federal S&Ls. Until mid-1975, Federally-chartered savings and loan associations could acquire junior mortgages only if they also held the first mortgages on the same properties.[16/] Currently, Federal S&Ls may invest from 2 to 5 per cent of total assets in junior mortgage in cases where they do not hold the first mortgages.[17/] There are no regulatory restrictions on the use of funds by borrowers.

Federal credit unions. Until recently, Federally-chartered credit unions were permitted to make first or junior home mortgages with maturities of up to 10 years, with no per cent-of-asset or use-of-funds restrictions. Regulations effective in May 1978 permit Federal credit unions to make first mortgages with maturities of up to 30 years and junior mortgages with maturities of up to 12 years.[18/] There are no per cent-of-asset, use-of-funds, or loan-to-value ratio restrictions on junior mortgage lending under the revised regulations. However, interest rates on such loans may not exceed 1 per cent per month, inclusive of all prepaid interest, processing fees and other service charges.

State-chartered depository institutions. The junior mortgage powers of state-chartered depository institutions vary from state to state, and are often different for types of institutions within a state. Table 7 provides a summary of current state regulations. Some of the highlights are as follows:

-- Commercial banks. Restrictions on junior mortgage lending by state-chartered commercial banks have been eased in some areas in recent years; for example, in Colorado and Nevada, state-

chartered banks have recently been provided the same powers as National banks. While no state specifically prohibits state-chartered banks from making junior mortgages, such banks are currently prohibited from making loans secured primarily by junior liens on real estate in one-third of the states. Most states that permit their banks to take junior mortgages as primary or secondary collateral place some restrictions on loan size, maturity, proportion of property value that may be mortgaged, and/or proportion of bank portfolio that may be invested in such assets. In a few states, the banks may make junior mortgages only for the purpose of home improvement.

-- Savings and loans. About a dozen states prohibit state-chartered S&Ls from making loans secured primarily by junior liens, and in about 25 states such institutions may make junior mortgages only if they also hold the first mortgage. Nine states allow their S&Ls to make loans secured primarily by second mortgages only if the proceeds of the loan are to be used for home improvement.

-- Mutual savings banks. Twelve of the 17 states with mutual savings banks permit these institutions to make loans secured primarily by junior liens on real estate. However, in four of these states the institution may make a junior mortgage loan only if it also holds the first mortgage.

-- Credit unions. Only 2 states specifically prohibit state-chartered credit unions from making junior mortgages, and there have been some recent adjustments to state statutes in order to specifically authorize junior mortgage lending; such provisions were enacted in Florida and Massachusetts in 1977. Still, in 19 states the credit union statutes are silent as to mortgage loans of any type, and in an additional 11 states the statutes authorize first mortgage loans but are silent as to junior mortgages. Thus, in these 30 states the junior mortgage lending powers of state-chartered credit unions are unclear.

Finance companies. Finance companies in 38 states are permitted to make loans secured by real estate (Table 8). However, trade sources indicate that restrictions on loan size and/or maximum maturity render most junior mortgage loans unprofitable, relative to unsecured personal loans, in 7 of these states--Arizona, Florida, Georgia, Nebraska, New Mexico, North Dakota, and Washington. In only one state--Missouri--are finance company junior mortgages restricted in terms of purpose; in this state, the proceeds of the loan may not be used for home improvement.[19/]

Mortgage companies. Mortgage company lending activities are not regulated in any formal way, and these companies may make junior mortgages without lending restrictions.[20/] However, mortgage companies ordinarily sell the mortgage loans they originate. Since junior

mortgages are of limited marketability, mortgage banker participation in this market is rather limited; according to data from the Mortgage Bankers Association, junior mortgages have been accounting for less than half of one per cent of total loans closed by mortgage companies in recent years. In some cases, of course, the mortgage company subsidiary of a bank holding company will retain the loans it makes.

State ceilings on junior mortgage interest rates

State-imposed interest ceilings may make junior mortgage lending unprofitable for some lenders.[21/] Moreover, different types of institutions may be subject to different rate ceilings in a given state. Maximum interest rates permitted under state consumer loan laws ordinarily pose no serious constraints to finance company junior mortgage lending in states permitting these institutions to make loans secured by real estate (see Table 8). However, junior mortgage lending by other types of institutions may be constrained by interest rate ceilings.

Table 9 provides a summary of state rate ceilings on junior mortgage loans made by institutions other than finance companies. Only 12 states and the District of Columbia have established special ceilings for junior mortgages, permitting annual percentage rates ranging from 11-1/2 per cent to 18 per cent.[22/] In the 7 states that have adopted the Uniform Consumer Credit Code--Colorado, Idaho, Indiana, Kansas, Oklahoma, Utah and Wyoming--depository institutions are subject to the same interest rate ceilings as finance companies. These ceilings are high enough to pose few constraints on junior mortgage lending.

The applicable law is unfavorable or unclear in many of the remaining 31 states. In some states, institutions must make junior mortgages under the same rate ceilings that apply to first mortgages. There are 18 states without either junior mortgage statutes or UCCC provisions, where ceilings on mortgage rates are set at 10 per cent or less, and these maximums may render junior mortgage lending unprofitable. In New York, for example, all loans to individuals secured primarily by real estate are subject to a ceiling of 8.5 per cent.

In a number of states, the regulatory situation is quite uncertain, since it is not clear which statute applies to junior mortgages. In Pennsylvania, for example, there is no special second mortgage ceiling, and it is not clear whether junior mortgages should fall under the consumer loan limit (12 per cent) or the first mortgage limit (a floating ceiling tied to a long-term Treasury bond rate). In such situations, lenders have become reluctant to grant junior mortgages at the consumer loan limit, while lending at the first mortgage ceiling may not be economically feasible.

State constitutional restrictions

State constitutions may contain provisions affecting junior mortgage lending by all types of investors in a state. In Texas, a Homestead Law specifies that junior mortgage loans secured by homes may not be made by an institution or individual unless the purpose of the loan is home improvement or the payment of taxes. This is apparently the only state with such an overriding constraint on junior mortgage lending.

TABLE 1

AVERAGE SALES PRICES OF EXISTING SINGLE-FAMILY HOMES FOR THE UNITED STATES AND EACH REGION

	United States		Standard Census Regions							
			Northeast		North Central		South		West	
Year	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean
1968	$20,100	$22,300	$21,400	$24,200	$18,200	$19,900	$19,000	$22,000	$22,900	$25,200
1969	21,800	23,700	23,700	26,600	19,000	21,100	20,300	23,500	23,900	26,700
1970	23,000	25,700	25,200	28,400	20,100	22,600	22,200	25,300	24,300	27,400
1971	24,800	28,999	27,100	30,600	22,100	24,300	24,300	27,800	26,500	29,700
1972	26,700	30,100	29,800	33,600	23,900	25,700	26,400	30,100	28,400	32,300
1973	28,900	32,900	32,800	36,800	25,300	28,100	29,000	33,200	31,000	35,400
1974	32,000	35,800	35,800	39,700	27,700	30,600	32,300	36,200	34,800	39,000
1975	35,300	39,000	39,300	43,600	30,100	33,100	34,800	38,800	39,600	44,100
1976	38,100	42,200	41,800	45,900	32,900	35,900	36,500	40,900	46,100	50,300
1977	42,900	47,900	44,400	49,100	36,700	40,200	39,800	45,000	57,300	63,200

Source: National Association of Realtors, Monthly Report, "Existing Home Sales."

TABLE 2

HOUSEHOLD EQUITY IN HOMES
(Amounts in billions of dollars)

End of Year	Value of Housing Stock Owned by Households 1/	Home Mortgage Debt Owed by Households 2/	Household Equity in Homes (Col.(1) - Col.(2)
	(1)	(2)	(3)
1970	767.5	292.7	474.8
1971	807.5	321.0	486.5
1972	907.9	360.9	547.0
1973	1,035.4	402.2	633.2
1974	1,168.7	436.8	731.9
1975	1,265.0	477.4	787.6
1976	1,370.0	543.5	826.5
1977	1,562.5	628.3	934.2

1/ Owner-occupied dwellings in both single family and multifamily structures, including estimates of improved land. Mobile homes are excluded.

2/ First and junior mortgage debt secured by 1- to 4-family properties, excluding construction loans. Mortgages on condominium units in multifamily structures are included.

SOURCES: MIT-PENN-SSRC model, Flow of Funds Accounts, HUD.

TABLE 3

JUNIOR MORTGAGE BORROWING AND
REFINANCING ACTIVITY BY HOUSEHOLDS
(numbers of respondents)

All respondents	2563
With first mortgages	1035
With junior mortgages	64
With refinanced first mortgages	82

Junior Mortgages

Primary use of junior mortgage funds	
Downpayment on primary or second home	11
Home improvement or repair	13
Remodel or add to house	10
Pay bills, taxes, medical and education expenses	11
Buy appliances	2
Other[1/]	17

Refinancing of First Mortgages

Refinanced primarily to obtain lower interest rate or longer maturity	11
Refinanced primarily to raise additional funds	71
Primary use of additional funds	
Downpayment or purchase of second home	6
Home improvement or repair	15
Remodel or add to house	19
Pay bills, taxes, medical and education expenses	13
All other[2/]	18

1/ Includes 6 cases where the primary use of funds was not ascertained.

2/ Includes 1 case where the primary use of funds was not ascertained.

Source: 1977 Consumer Credit Survey conducted by the University of Michigan's Survey Research Center on behalf of the Federal Reserve Board, the Federal Deposit Insurance Corporation, and the Comptroller of the Currency.

TABLE 4

RATES AND TERMS ON CONSUMER LOANS MADE BY
COMMERCIAL BANKS AND FINANCE COMPANIES
Year-end 1977

Commercial Banks

Most common rate charged on consumer instalment loans:

New Automobiles (36 months)	10.91%
Mobile Homes (84 months)	11.95%
Other Consumer Goods (24 months)	13.05%
Personal Loans (12 Months)	13.60%
Credit Card Plans	16.91%

Finance Companies

Average Values	New Automobiles	Mobile Homes	Other Consumer Goods	Personal Loans
Finance rate	13.21%	13.54%	19.64%	20.68%
Maturity	41.4 mo.	129.0 mo.	25.7 mo.	42.8 mo.
Amount financed	$5,343	$9,586	$636	$1,493

Source: Federal Reserve statistical releases E.10, G.26, and G.10.

TABLE 5

TYPICAL TERMS OFFERED BY BANKS ON
JUNIOR MORTGAGE LOANS TO INDIVIDUALS
1977

	High	Low	Average
Amount financed	$ 80,000	$ 4,000	$ 14,757
Per cent of appraised value	100%	20%	79%
Maturity	15 yrs.	5 yrs.	9 yrs.
Interest rate	15%	6%	11.63%
Total closing costs	$850	$16	$ 138.55

Source: The Consumer Bankers Association.

TABLE 6

JUNIOR MORTGAGE DEBT ON 1- TO 4-FAMILY PROPERTIES
HELD BY SELECTED INSTITUTIONS
(Amounts in millions of dollars)

Type of Holder	Mid-1971[1/]	Mid-1975[2/]
Savings and Loans	476	NA
Commercial Banks	547	NA
Mortgage Companies	289	NA
Mutual Savings Banks	90	NA
Life Insurance Companies	30	NA
Finance Companies	NA	1,946
Credit Unions	NA	370

1/ Based on the 1971 Census Bureau Survey of Residential Finances.
2/ Based on the 1975 Federal Reserve Survey of Finance Companies, and the 1975 Credit Union National Association Mortgage Lending Survey.
NA--not available.

TABLE 7

POWERS OF STATE-CHARTERED DEPOSITORY INSTITUTIONS
TO MAKE JUNIOR MORTGAGES SECURED BY HOMES

State	Commercial Banks	Mutual Savings Banks	Savings and Loans	Credit Unions
Alabama	A,F,Q		A,E	D
Alaska	A,I	A,E,I		
Arizona	A,F,G		A,F,G	A
Arkansas	A,F		A	C
California	A,F		A,J	B
Colorado	A,H,Q		A,E,I	D
Connecticut	A,I,J	A,F	A,F,J	B
Delaware	A,I	A,I	A,I	
Florida	A,I		A,F,G,Q	A
Georgia	A,F		A,Q	D
Hawaii	A,F		A,F	C
Idaho	A		A,G,J	A
Illinois	A,I,Q		A,F,G	B
Indiana	A,F	A,F	A,F	P
Iowa	A		A	P
Kansas	A		A,E	B
Kentucky	R		A,G	C
Louisiana	A		A,G	C
Maine	A	A	A	C
Maryland	A,I	A	A,E,I	C
Massachusetts	A	A	A	A
Michigan	A,G,I		A,G,I	D
Minnesota	A,F,Q	A,E	A,F	C
Mississippi	A		A,E	D
Missouri	A		A,E	D
Montana	A,E		A,E	D
Nebraska	A		A,E	D
Nevada	A,H		A,E	D
New Hampshire	A,F	A,F	A,F	B
New Jersey	A,E,F,Q	A,E,F,Q	A,E,F,Q	D
New Mexico	A,I		A,E,F	D
New York	A	A	A	B
North Carolina	A		A,E	D
North Dakota	A,F		A,F	B
Ohio	A,E,F		A	C

TABLE 7 (cont'd)

POWERS OF STATE-CHARTERED DEPOSITORY INSTITUTIONS
TO MAKE JUNIOR MORTGAGES SECURED BY HOMES

State	Commercial Banks	Mutual Savings Banks	Savings and Loans	Credit Unions
Oklahoma	A,F,I		A,E,G	D
Oregon	A	A	A,E	D
Pennsylvania	A,E	A,E	A,E	C
Rhode Island	A,E,G,I	A,E,G,I	A,E,G,I	B
South Carolina	A		A,E	B
South Dakota	A,E,F		A,E	
Tennessee	A		A,E	D
Texas	A,E,F		A,E,F	C
Utah	A		A,E	D
Vermont	C,Q	C,Q	C,Q	D
Virginia	A		A,E	D
Washington	A,F	A,F	A,E,I	C
West Virginia	A		A	D
Wisconsin	A	A	A,E	B
Wyoming	A,F		A,F	

NOTE: Blank cells indicate that the state has no state-chartered depository institutions of that type.

Legend for Table 7

A. Law specifically authorizes junior mortgages.

B. Law authorizes real estate loans generally, and does not limit to first mortgage loans.

C. Law specifically authorizes first mortgage loans, but is silent as to junior mortgage loans.

D. Law silent as to mortgage loans of any type.

E. May hold junior mortgage only if also hold the first.

F. Junior mortgage may not be primary security for loan; may take only as excess collateral; may grant only in "abundance of caution" situtations; my grant only to cover "debts previously classified;" etc.

G. Junior mortgages may be primary security only if used for home improvements.

H. Has same junior mortgage powers as National banks.

I. Sum of first and junior mortgages cannot exceed specified percentage of appraised value.

J. Junior mortgages may not exceed specified percentage of total assets, or capital plus surplus.

P. Law specifically prohibits second mortgage loans.

Q. Regulatory agency discourages junior mortgage lending.

R. Cannot also hold first mortgage; first mortgages granted in state include clause allowing extensions to be made for home improvements.

NOTE: Information obtained through an informal Federal Reserve staff survey of the appropriate state regulator commissions, and from the Nation Credit Union Administration.

TABLE 8

STATES PERMITTING FINANCE COMPANY LOANS
SECURED BY REAL ESTATE

State	Maximum Loan Size	Maximum Maturity
Alabama	None	None over $1,000
Arizona	$2,500	36-1/2 Months
California	None	84-1/2 Months to $10,000; none over $10,000
Colorado	None	None over $1,000
Connecticut	$5,000	None over $1,800
Delaware	10% Net Worth of Lender	84 Months
Florida	$2,500	36-1/2 Months
Georgia	$3,000	36-1/2 Months
Hawaii	None	72 Months
Idaho	None	None over $1,600
Illinois	$10,000	121 Months
Indiana	None	None over $1,300
Iowa	20% Net Worth of Lender	None over $1,000
Kansas	None	None over $1,000
Kentucky	$7,500	61 Months
Louisiana	$25,000	None over $1,000
Maryland	$6,000	72-1/2 Months
Massachusetts	None	None
Mississippi	None	None
Missouri	None	None
Montana	$7,500	None over $2,500
Nebraska	$3,000	36 Months
New Hampshire	None	None
New Jersey	None	None
New Mexico	$2,500	None
North Carolina	$7,500	None
North Dakato	$2,500	None
Ohio	$15,000	60 Months
Oklahoma	None	None over $1,000
Oregon	$50,000	None
Pennsylvania	$5,000	60-1/2 Months
Rhode Island	None	None
South Carolina	None	None over $1,000
Utah	None	None over $1,600
Virginia	None	None
Washington	2% of Capital of Lender	24 Months
Wisconsin	None	None over $3,000
Wyoming	None	None over $1,000

Source: Household Finance Corporation.

TABLE 9

STATE INTEREST RATE CEILINGS ON
JUNIOR MORTGAGE LOANS TO INDIVIDUALS

State	Rate Ceiling	State	Rate Ceiling
Delaware	14%	Ohio	8%
Georgia	6	Rhode Island	15
Maryland	12	Texas	8
Massachusetts	18	Virginia	8
New Hampshire	18	West Virginia	6
New Jersey	15	D. C.	11½
North Carolina	12		

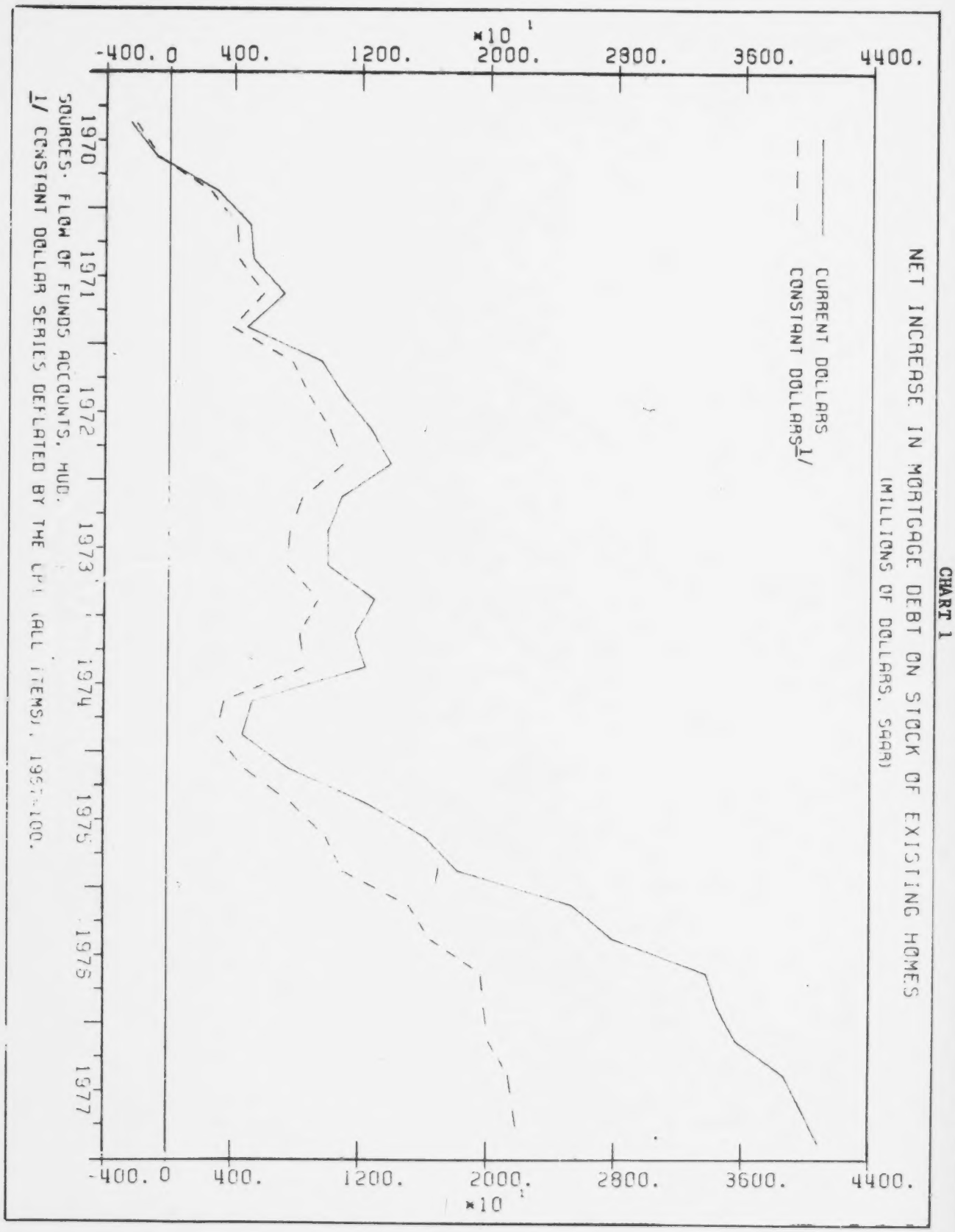
NOTE: Ceilings are defined in terms of actuarial rates, except for:
(a) Georgia, North Dakota, Texas, Virginia, West Virginia--add-on-rates;
(b) Delaware and Maryland--constant-ratio rates. The statutes generally define and limit fees for items such as credit reports, appraisal, title examination, etc.

Source: Financial Publishing Company, The Cost of Personal Borrowing in the United States.

CHART 1

NET INCREASE IN MORTGAGE DEBT ON STOCK OF EXISTING HOMES

(MILLIONS OF DOLLARS, SAAR)



SOURCES: FLOW OF FUNDS ACCOUNTS, HUD.

1/ CONSTANT DOLLAR SERIES DEFLATED BY THE CPI (ALL ITEMS), 1967=100.

CHART 2

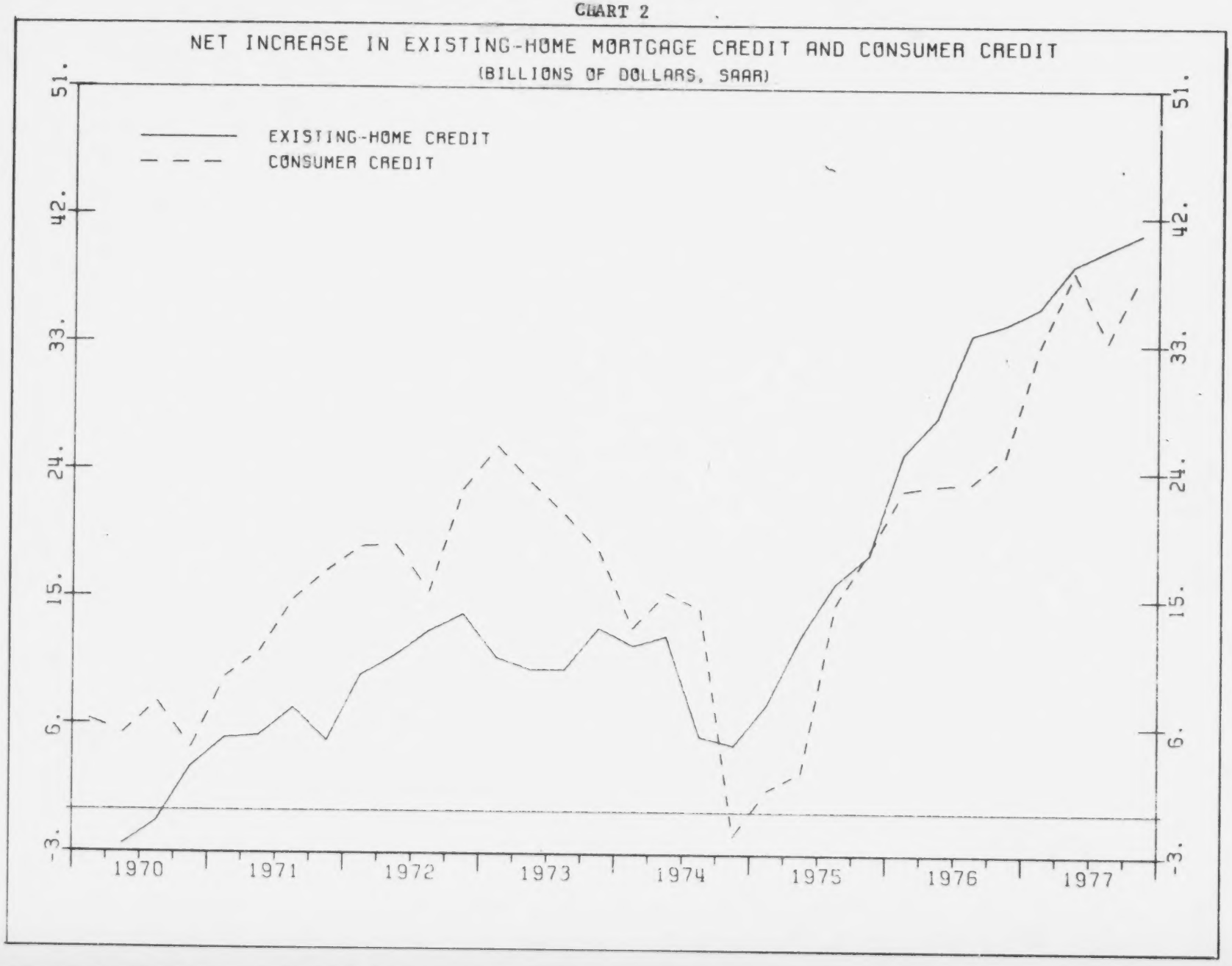
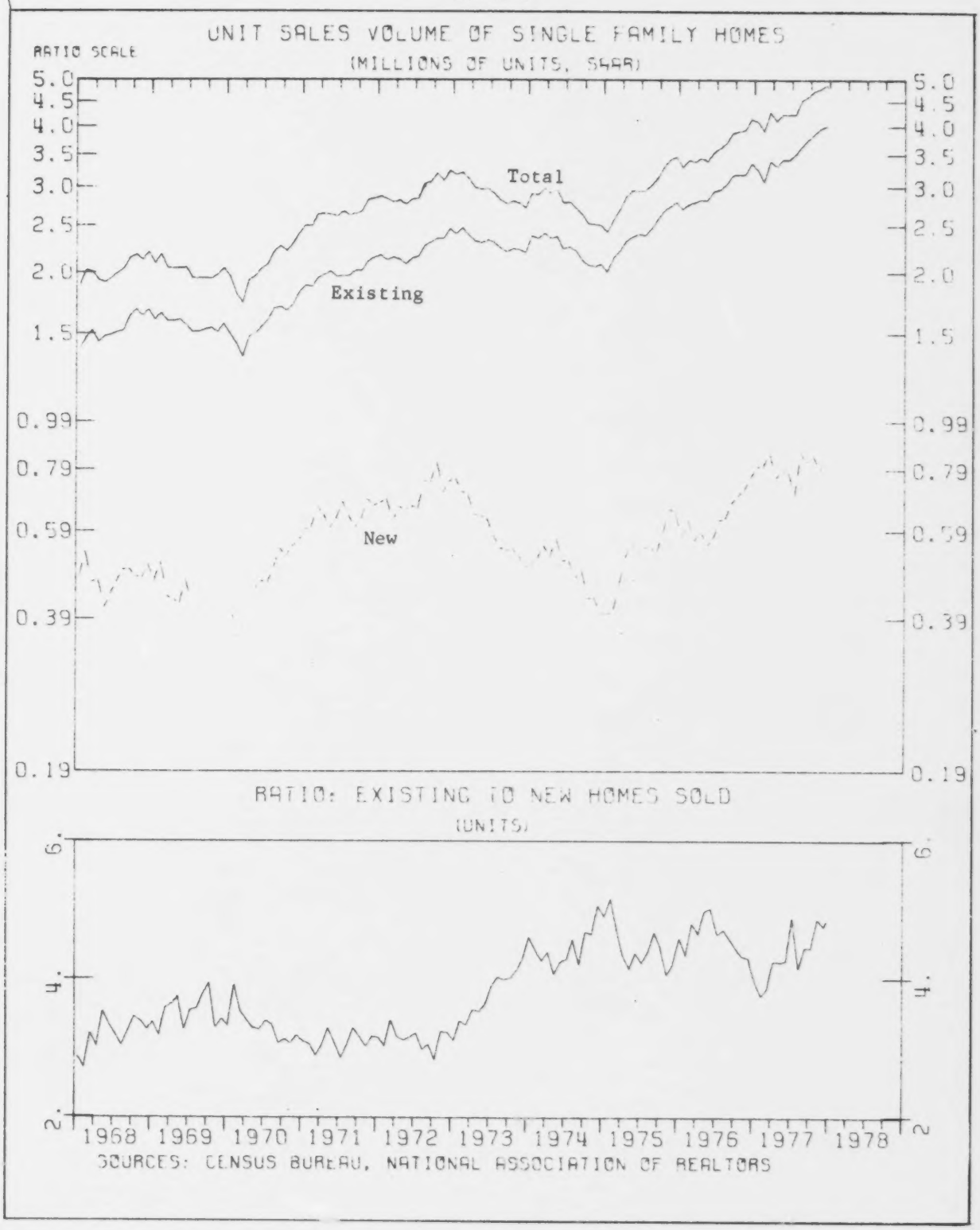

NET INCREASE IN EXISTING-HOME MORTGAGE CREDIT AND CONSUMER CREDIT
(BILLIONS OF DOLLARS, SAAR)
EXISTING-HOME CREDIT
CONSUMER CREDIT
51.
42.
33.
24.
15.
6.
-3.
1970
1971
1972
1973
1974
1975
1976
1977

CHART 3


UNIT SALES VOLUME OF SINGLE FAMILY HOMES
RATIO SCALE
(MILLIONS OF UNITS, SAAR)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
0.99
0.79
0.59
0.39
0.19
Total
Existing
New
RATIO: EXISTING TO NEW HOMES SOLD
(UNITS)
6.
4.
2.
1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978
SOURCES: CENSUS BUREAU, NATIONAL ASSOCIATION OF REALTORS

FOOTNOTES

1/ Attempts have been made by Sommers and Rhine [5], and by Gelb [1], to measure home mortgage borrowing for non-real estate purposes, and Meltzer [2] has stressed that mortgage loans may finance acquisitions of financial assets and real assets other than houses and that mortgage borrowing may substitute for other types of borrowing. An analysis of the implications of the recent upsurge in borrowing against housing equity for aggregate economic activity, and the outlook for the volume of such borrowing, has been provided in [3].

2/ The generation of capital gains on housing provides collateral for borrowing at mortgage rates and terms available in the market--ordinarily more favorable than available on consumer credit--but does not necessarily provide households with increases in purchasing power. This point is discussed further in [3].

3/ This series, based on originations of new-home mortgages, cannot be estimated prior to 1970 since aggregate data on originations are not available for earlier periods. The estimated series could be sharpened a bit by allowing for amortization of new-home mortgages within the period of origination. However, even when quarterly data are used, the amounts are small--about 0.25 per cent of originations, given current market interest rates and loan maturities.

4/ Principal balances may rise on outstanding reverse-annuity mortgages, or on graduated-payment mortgages with negative amortization in their early years, but the amounts involved in these non-standard mortgage arrangements are as yet unimportant.

5/ According to HUD's Annual Housing Survey, about 30 per cent of all "specified" owner-occupied housing units (1-family homes on less than 10 acres and no business on property) were free of mortgage debt in 1976.

6/ Scattered data from finance companies, credit unions, and commercial banks indicate that delinquency rates on junior mortgages have been quite low in recent years, in comparison with delinquencies on consumer instalment credit. Moreover, delinquency rates on first mortgages at major holders rose only slightly in the recent recession, and foreclosure rates have changed little during the past 5 years.

7/ A way of calculating the effective interest rate on additional funds raised by refinancing an outstanding first mortgage is presented in Section III.

8/ Data for 1970-71 are from the Census Survey of Residential Finances, which excluded coverage of finance companies and credit unions.

9/ The CBA membership includes a disproportionate number of small banks. However, informal Federal Reserve surveys of large commercial banks confirm the increasing participation of banks generally in the junior mortgage market.

10/ The following discussion assumes that interest rates on mortgages are fixed over the lives of the contracts.

11/ This is possible, of course, only when state interest-rate ceilings are not binding.

12/ That is, abstracting from transactions costs and nonrate loan terms.

13/ Some junior mortgages are also acquired by households, particularly during periods of tight money; homeowners who sell their houses subject to the assumption by the buyer of the outstanding first mortgage may take back a second "purchase-money mortgage" as partial payment. This type of junior mortgage financing is not discussed in this section.

14/ The Comptroller of the Currency conducted special surveys of junior mortgage lending by National banks in connection with the September 30, 1977 and December 31, 1977 Reports of Condition. Preliminary results from the September survey indicate that about 3 per cent of the amount of 1- to 4-family mortgages held by National banks were secured by junior liens.

15/ The expansion of the junior mortgage lending powers of National banks was provided by the Housing and Community Development Act of 1974, signed into law on August 22, 1974.

16/ The Housing and Community Development Act of 1974 authorized the Federal Home Loan Bank Board to revise the regulations concerning junior mortgage lending by Federal S&L's. The revised regulations were issued in June 1975.

17/ The exact percentage will depend on the association's net worth position.

18/ The change in maturity was authorized by the Depository Institutions Act of 1977, signed into law on April 19, 1977.

19/ In Missouri, home improvement loans are subject to a lower interest rate ceiling than are junior mortgages.

20/ As discussed below, however, State-imposed usury ceilings may restrict lending by all institutions when market interest rates are high.

21/ There are no Federal junior mortgage programs or rate ceilings.

22/ The 6 per cent add-on rate ceiling for West Virginia translates into nearly 12 per cent, on an annual-percentage-rate basis.

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